

**DIRECT TESTIMONY ON REHEARING OF CHERYLANN MEARS
ON BEHALF OF AMERITECH-ILLINOIS**

~~Q. PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.~~

~~A. My name is Cherylann Mears. I am an Associate Director-Cost Analysis and Regulatory for SBC Telecommunications Inc., located at One Bell Center, 38-V-07, St. Louis, Missouri 63101.~~

~~Q. WHAT ARE YOUR RESPONSIBILITIES AS ASSOCIATE DIRECTOR-COST ANALYSIS AND REGULATORY?~~

~~A. I am responsible for:~~

- ~~• Developing cost methods that determine the costs incurred by SBC's incumbent local exchange carrier subsidiaries ("SBC ILECs") in providing telephone company services;~~
- ~~• Supervising the production of cost studies; and~~
- ~~• Analyzing cost study results.~~

~~Q. PLEASE OUTLINE YOUR WORK EXPERIENCE.~~

~~A. I began my career with Southwestern Bell Telephone Company ("SWBT") in January 1986 and worked in several capacities in the Legal Department from 1986 to 1990. These positions were primarily secretarial. In 1990 I was promoted to the Texas State Rates organization in Austin with responsibilities involving the administration of various SWBT rates and tariffs. In April of 1993 I transferred to the cost studies division in St. Louis, Missouri. I was responsible for producing cost studies for Plexar Custom. Plexar Custom studies identify, on a customer-specific basis, the costs for a central-office based PBX-like service. In January 1997 I became responsible for producing recurring cost studies for loop and transport services including Unbundled Network Elements, retail and wholesale services. In May of 1999 I assumed my present position in the cost studies division supervising the production of both recurring and~~

1 ~~nonrecurring cost studies for loop and transport services. As of January~~
2 ~~2000, I supervise the transport group responsible for all interoffice~~
3 ~~transport and circuit equipment recurring cost studies in the thirteen SBC~~
4 ~~ILEC states.~~

5 **~~Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?~~**

6 ~~A. I received my Bachelor of Business Administration in Finance from~~
7 ~~St. Edward's University in 1992. I received my Masters of Arts in~~
8 ~~Telecommunications from Webster University in 1998.~~

9 **~~Q. HAVE YOU PREVIOUSLY APPEARED AS A WITNESS?~~**

10 ~~A. Yes, I have appeared as a witness in the following proceedings:~~

11 ~~• Wisconsin Docket No. 6720-TI-161, UNE & Reciprocal Compensation;~~
12 ~~and~~

13 ~~• Missouri Docket No. TO-2001-455, AT&T Arbitration.~~

14 **~~Q. HAVE YOU PREPARED ANY EXHIBITS TO YOUR DIRECT~~**
15 **~~TESTIMONY ON REHEARING?~~**

16 ~~A. Yes. I am filing under confidential cover:~~

17 ~~• Schedule CM-1 Illinois Broadband Service (Phase I) Data TELRIC~~
18 ~~Recurring Study, 2001, May 2001; and~~

19 ~~• Schedule CM-2 Illinois Broadband Service (Phase II) DLE-Combined~~
20 ~~Voice and Data Service TELRIC Recurring Study, 2001, May 2001.~~

21 **~~Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?~~**

22 ~~A. The purpose of my testimony is to respond to Question 12 of~~
23 ~~Commissioner Squires' list of questions. Specifically, I will provide the~~
24 ~~recurring cost results for Broadband Service, Phases I and II. I also will~~
25 ~~describe the basis for the cost studies, the data sources and methodology~~
26 ~~used, and will explain why the results reflect the forward-looking TELRIC~~

costs Ameritech Illinois would incur to provide the wholesale Broadband Service. Mr. Chris Cass sponsors and explains the development of the nonrecurring costs and nonrecurring cost studies for the wholesale Broadband service.

TELRIC COST STUDY METHODOLOGY

Q. WHAT TYPE OF COST METHODOLOGY DOES THE FCC REQUIRE AS A BASIS FOR PRICING UNBUNDLED NETWORK ELEMENTS?

A. The FCC requires Total Element Long Run Incremental Costs (TELRIC) to be used as a basis for pricing Unbundled Network Elements (UNEs). TELRIC is defined as the forward-looking economic costs of an element, including shared costs and a reasonable allocation of joint and common costs.

Q. IS THE SBC ILECS' WHOLESALE BROADBAND SERVICE AN "UNBUNDLED NETWORK ELEMENT"?

A. No. The wholesale Broadband Service is not an Unbundled Network Element as defined by the FCC. However, Ameritech Illinois has voluntarily agreed to price the Broadband Service using the TELRIC-based costing methodology to the extent that it offers the wholesale Broadband Service.

Q. DO THE BROADBAND SERVICE RECURRING COST STUDY RESULTS THAT YOU ARE PRESENTING IN THIS PROCEEDING MEET THE APPLICABLE TELRIC REQUIREMENTS?

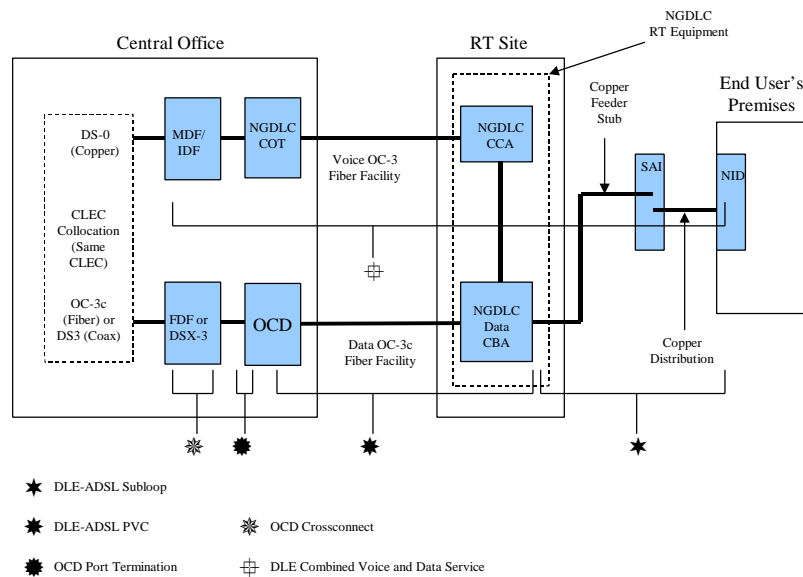
A. Yes. The cost study results I am presenting do meet these requirements.

BROADBAND SERVICE RECURRING TELRIC STUDIES

Q. YOU HAVE ATTACHED TWO BROADBAND STUDIES. PLEASE EXPLAIN WHAT EACH STUDY ENTAILS.

A. The Broadband Service elements were developed in two phases. The Phase I recurring cost study provides the results for providing the data portion of the service; the Phase II recurring cost study provides the results

for the combined voice and data service. The detailed drawing below depicts Broadband Service with all of the cost elements.



Q. WHAT ELEMENTS ARE CONTAINED IN THE PHASE I STUDY?

A. The Phase I recurring cost study contains the elements for the transport of the data-only portion of the service. The recurring study has five elements:

- DLE-ADSL HFPSL (Line Shared) — Digital Loop Equipment-ADSL High Frequency Portion of the Subscriber Sub-Loop;
- DLE-ADSL Sub-Loop (Data only) — Digital Loop Equipment-ADSL Sub-Loop;
- DLE-ADSL PVC (UBR) — Digital Loop Equipment-ADSL Permanent Virtual Circuit (Unspecified Bit Rate);
- OCD Port Terminations — Optical Concentrating Device Port Terminations; and

1 • ~~OCD Crossconnects to Collocation.~~

2 **~~Q. PLEASE DESCRIBE THE ABOVE LISTED RECURRING COST~~**
3 **~~ELEMENTS.~~**

4 ~~A. The DLE-ADSL HFPSL (Line Shared) and the DLE-xDSL Sub-Loop (Data~~
5 ~~only) include what are commonly called the “feeder stub” portion of a DLC-~~
6 ~~derived sub-loop and the “distribution” portion of that sub-loop. The feeder~~
7 ~~stub extends from the remote terminal (RT) equipment to the serving area~~
8 ~~interface (SAI) cabinet, and the distribution extends from the SAI cabinet to~~
9 ~~the end user’s premises. The cost for this element was taken from the~~
10 ~~Ameritech Illinois Unbundled Sub-Loops 2000 Study, 2-Wire DSL~~
11 ~~Compatible, ECS (Engineered Control Splice) to NID (Network Interface~~
12 ~~Device) Sub-loop element.¹ As there are no provisioning differences~~
13 ~~whether this copper sub-loop is used for voice or data, the costs were~~
14 ~~developed using the same methodology for both elements.~~

15 ~~The DLE-ADSL PVC (UBR) is the portion of the Broadband Service~~
16 ~~facilities from the NGDLC equipment in the RT site through the fiber~~
17 ~~distribution frame (FDF) into the OCD in the central office. The cost of this~~
18 ~~element contains the combined costs of the OCD, fiber feeder and a~~
19 ~~portion of the “common” and all of the data-specific components of the~~
20 ~~NGDLC divided by the capacity of the facilities.~~

21 ~~The OCD Port Terminations are the ports (OC3 or DS3) which the CLEC~~
22 ~~purchases on the OCD. Only one CLEC can connect to each of these~~
23 ~~ports.~~

24 ~~— The OCD Crossconnects to Collocation consist of the equipment required~~
25 ~~at the FDF (for OC3 ports) or the DSX-3 frame (for DS3 ports) to connect~~
26 ~~the OCD port and a Collocator’s cage.~~

¹ Ameritech Illinois has already filed the Unbundled Sub-Loops 2000 Study in complying with the conditions set out in the Commission’s order in the SBC-Ameritech merger approval docket, 98-055.

~~Q. WHAT ELEMENTS ARE BEING PRESENTED IN THE RECURRING STUDY FOR BROADBAND SERVICE PHASE II?~~

~~A. There is only one incremental recurring rate or cost element in Phase II: DLE-Combined Voice and Data Service. The combined voice and data service element consists of the full copper sub-loop from the RT to the customer's premises and the use of a separate OC-3 fiber transport facility from the RT site to the central office terminal (COT). In the COT, the SBC ILEC would break out the corresponding DS0 channel to an end user's voice service and deliver that channel to the Main Distribution Frame (MDF) and from the MDF to the Intermediate Distribution Frame (IDF) (2-wire voice grade crossconnect). This would provide the voice path to the CLEC.~~

~~GENERAL COST STUDY METHODOLOGY~~

~~Q. HOW ARE RECURRING COSTS CALCULATED?~~

~~A. Recurring costs are developed by identifying all of the investment required to provision the element. The recurring cost is then calculated by identifying capital costs (depreciation, cost of capital, and income tax) and operating expenses associated with the investment.~~

~~BROADBAND SERVICE PHASE I – DATA ONLY~~

~~Q. HOW WERE THE RECURRING COSTS DEVELOPED FOR THE SUB-LOOP ELEMENTS?~~

~~A. The costs for the sub-loop rate elements used the same costs that were developed for the Unbundled Sub-Loop 2000 Cost Study because the sub-loop study contains the costs for the distribution portion of the loop from the EGS to the NID. The weightings between the feeder and distribution in each Band (A, B and C) were used to calculate a statewide average.~~

~~Q. HOW WERE THE RECURRING COSTS DEVELOPED FOR THE DLE-ADSL PVC (UBR) ELEMENT?~~

1 ~~A. The DLE ADSL PVC (UBR) element consists of a combination of three~~
2 ~~costs elements: fiber feeder, Lite Span 2000 costs at the RT, and the OCD~~
3 ~~costs in the central office. I'll explain the cost development of each of~~
4 ~~these elements below.~~

5 ~~**Q. PLEASE EXPLAIN THE FIBER FEEDER COST DEVELOPMENT.**~~

6 ~~A. The fiber feeder is a 2-fiber optic span from the RT to the fiber distribution~~
7 ~~frame (FDF) in the central office. The study used the LFAM model results~~
8 ~~to derive the average feeder length based on aerial and buried conduit and~~
9 ~~underground cable. The monthly recurring costs were added together and~~
10 ~~then divided by the capacity of the equipment to develop the cost per line.~~
11 ~~The capacity of the equipment was provided by SBC's Network~~
12 ~~organization.~~

13 ~~**Q. PLEASE DESCRIBE THE COST DEVELOPMENT OF THE LITE SPAN**~~
14 ~~**EQUIPMENT AT THE RT AND THE OCD EQUIPMENT IN THE**~~
15 ~~**CENTRAL OFFICE.**~~

16 ~~A. SBC's Network organization provided the standard forward-looking design~~
17 ~~for the Lite Span 2000 equipment at the RT and also the standard forward-~~
18 ~~looking design for the OCD equipment located in the Central Office. The~~
19 ~~SBC Program for Interoffice and Circuit Equipment (SPICE) model was~~
20 ~~used to calculate the monthly recurring costs. The designs provided by~~
21 ~~the Network organization were loaded into the SPICE model. SPICE then~~
22 ~~took the base investments for the common and hard-wired equipment,~~
23 ~~plug-ins, and optical jumpers and applied the appropriate loading factors~~
24 ~~(i.e., sales tax, in-place and power factors), divided by the capacity and~~
25 ~~then divided by the utilization factors to account for readiness to serve~~
26 ~~capacity that would otherwise not be costed and recovered. The result is a~~
27 ~~unit investment. The unit investments were then multiplied by the~~
28 ~~appropriate number of pieces of equipment required in the design, which~~
29 ~~resulted in a total investment per design. The total investment per design~~
30 ~~was multiplied by the Annual Cost Factors (ACFs) resulting in a recurring~~
31 ~~annual cost. The annual costs were divided by 12 resulting in the~~

1 ~~recurring monthly cost. These recurring monthly costs were then added to~~
2 ~~the recurring monthly cost of the fiber feeder to identify the total monthly~~
3 ~~cost for the DLE ADSL PVC (UBR) element.~~

4 ~~**Q. HOW WERE THE COSTS DEVELOPED FOR THE OCD PORT**~~
5 ~~**TERMINATIONS?**~~

6 ~~A. For the DS3 port, the base investments consisted of a DSX jack and the~~
7 ~~DS3 port card. As explained above, the SPICE model was used to take~~
8 ~~the base investments to a unit investment. The unit investments were~~
9 ~~multiplied by the quantity required in the design and then the ACFs were~~
10 ~~applied, divided by 12, resulting in a monthly recurring cost per DS3 port.~~
11 ~~For the OC3 port, the components consist of the port card and the card~~
12 ~~slot on the FDF. As explained above, the SPICE model was used to~~
13 ~~develop the monthly recurring cost for the OC3 port.~~

14 ~~**Q. HOW WERE THE COSTS DEVELOPED FOR THE OCD**~~
15 ~~**CROSSCONNECTS TO COLLOCATION?**~~

16 ~~A. There are two crossconnects elements: OC3 and DS3. The OC3~~
17 ~~crossconnect consists of two optical jumpers. The DS3 crossconnect~~
18 ~~consists of a DSX3 jack. Again, the investments were loaded into the~~
19 ~~SPICE model to convert the investments to monthly recurring costs.~~

20 ~~**BROADBAND SERVICE PHASE II**~~

21
22 ~~**Q. WHAT ARE THE RECURRING COST COMPONENTS OF THE DLE-**~~
23 ~~**COMBINED VOICE AND DATA SERVICE (BROADBAND SERVICE,**~~
24 ~~**PHASE II)?**~~

25 ~~A. There are three components which make up the total cost for the DLE-~~
26 ~~Combined Voice and Data Service: DLE-xDSL Sub-loop, fiber feeder and~~
27 ~~the voice portion of the Lite Span equipment at the RT and the Lite Span~~
28 ~~equipment in the Central Office (CO).~~

29 ~~**Q. WERE THE COST DEVELOPMENT AND THE COST RESULTS FOR**~~
30 ~~**THE DLE-XDSL SUB-LOOP THE SAME AS IN THE PHASE I STUDY?**~~

1 ~~A. Yes, the same cost calculations were used in the Phase II study for the~~
2 ~~sub-loop component. The only difference between the fiber feeder costs in~~
3 ~~Phase I (data only) and the fiber feeder costs in Phase II (voice/data) is~~
4 ~~that the voice/data fiber feeder requires four fibers while the data fiber~~
5 ~~feeder requires two fibers.~~

6 ~~**Q. HOW WERE THE COSTS DEVELOPED FOR THE REMOTE TERMINAL**~~
7 ~~**AND CENTRAL OFFICE TERMINAL EQUIPMENT?**~~

8 ~~A. These costs were developed in the same manner as the RT and OCD~~
9 ~~costs for Phase I using the SPICE model and applying annual cost factors.~~
10 ~~The RT costs included only the voice portion of the Lite Span 2000~~
11 ~~equipment because the data portion of the equipment is recovered in the~~
12 ~~Phase I element called DLE-ADSL PVC (UBR). The COT equipment~~
13 ~~identified the recurring cost for the Lite Span 2000 equipment located in~~
14 ~~the central office plus the crossconnect from the MDF to IDF. The~~
15 ~~investments and capacities were provided by SBC's Network organization.~~

16 ~~**Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY ON**~~
17 ~~**REHEARING?**~~

18 ~~A. Yes, it does.~~